11-101

Revised 4/22/2009

UNDERGRADUATE CURRICULUM PROPOSAL COVER SHEET

Title of Proposal – Must begin with Department Abbreviation:

CPSC Changes in Course Prerequisites for CPSC 1000, 110 and 1110

UTC RECORDS

MAR 17 2011

REGISTRATION

Check One: ☑ Full Proposal or ☐ Information Item

Effective Date for Curricular Offering: ~~Fall 2011~~ FALL 2011

FROM: Joseph M. Kizza, CPSC, X-4043; joseph-kizza@utc.edu

(proposal originator: include spokesperson's name, department, office number, telephone, e-mail)

Does this require new resources from the originating department or other department? No

Please include an explanation if yes.

Faculty of the originating department approved this proposal on 3-10-2011 (date), by a vote of 9 aye votes; 0 nay votes; 0 abstentions; 9 eligible voting members absent.

The following have examined this proposal:

	Printed name	Signature, date	Approve	Neutral	Disapprove*
Dept Head/Director:	Joseph M. Kizza	Joseph M. Kizza 3/17/11	✓		

College Curriculum Committee Date: _____ Vote: _____ Signature of Chair: _____

Spokespersons for Affected Departments:

Printed Name, Department	Signature, Date	Approve	Neutral	Disapprove*

Dean/Director:	W.H. Sutton		✓		
University Registrar:	Linda Orth	Linda Orth	Comments		
Provost/Representative:	J Sanders	6/9/11	✓		
	Printed name	Signature, date	Approve	Neutral	Disapprove*

Lab/studio fee requested: ☐

Provost:	Phil Oldham			
	Printed name	Signature, date	Approve	Disapprove*

*Those who disapprove may attach an explanation

ACTIONS on this proposal:	***Curriculum Committee***	***Faculty Senate***
Date the proposal was considered		
Vote of the body:		
Accepted as information item (*indicate date*)		
Approved as submitted (*indicate date*)		
Approved with amendments (amendments indicated and transmitted to all signatories above, date):		
Signature of Chair:		

Banner Catalog 3-21-11 AR

Acalog Catalog 3-22-11 CC

To: University Curriculum Committee

From: Joseph M. Kizza, Head
Computer Science and Engineering

Subject: Changes to the Pre-co-requisites for CPSC 1000, CPSC 1100 and CPSC 1110

The Computer Science and Engineering department proposes changes to the pre-co-requisites for the following courses: CPSC 1000, CPSC 1100 and CPSC 1110.

Rationale:

There was an overwhelming number of pre-co-requisite override requests last semester from students needing to take these three courses. To reduce these override requests, the department decided to revisit the pre-co-requistes of these courses. What follow are the old and new pre-co-requisites and syllabus for each course. Care has been taken to maintain the required standards.

OLD: CPSC 1000 Introduction to Computing

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(3) Credit Hours

Overview of the development of the electronic computer, its technology, capabilities, and limitations. Ethical and social issues are considered, as well as the role of computers in society. Introduction to the use of a range of useful microcomputer hardware and software. Extensive laboratory experience. Prerequisites: Math ACT subscore of 22 or higher, MATH 1006 with a minimum grade of C or department head approval. Supplementary course fee assessed

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NEW: CPSC 1000 Introduction to Computing

(3) Credit Hours

Overview of the development of the electronic computer, its technology, capabilities, and limitations. Ethical and social issues are considered, as well as the role of computers in society. Introduction to the use of a range of useful microcomputer hardware and software. Extensive laboratory experience. Supplementary course fee assessed. *PRE-CO-REQUISITES: None*

SYLLABUS:

COURSE:	CPSC.1000.00 & 01/CRN 21083 & 21084
TITLE:	Introduction to Computing
CREDIT HRS.:	3.0
SCHEDULE:	On-line
FACULTY:	Dorothy Galas
	Dorothy Galas@utc.edu

PRE-CO-REQUISITES: None

COURSE DESCRIPTION: Overview of the development of the electronic computer, its technology, capabilities, and limitations. Ethical and social issues are considered, as well as the role of computers in society. Introduction to the use of a range of useful microcomputer hardware and software. Extensive laboratory experience. Supplementary course fee assessed.

ATTENDANCE AND MAKE-UP POLICIES:

While mutual assistance can occur all assignments are to be done independently. Students are free to seek assistance on the labs and homework from other students, instructors, or lab assistance; however, the work should be the student's work. **NO assistance is acceptable with test material. Evidence of assistance with a test will result in a zero for that module and may result in immediate failure of the class.**

HELP

There are multiple options available to you for help with this course. First and foremost is your instructor who is there to help you with any difficulty you might be having. Another source of help is SAM which comes with Training. The SAM Training provides step by step details on how to do each task. Lastly, there will be help on a scheduled basis provided by a teaching assistant. A schedule of the days and time this help is available will be listed in UTC Online.

Student Responsibilities

You are required to read and adhere to all exams schedule. Your failure to keep up with your work will result in poor performance in the class. No extra credit assignments will be given for the purpose of increasing your grade. Exceptions to the printed course schedule will be announced on UTC online and/or through email. It is your responsibility to read the announcements. You are responsible for notifying the instructor of any difficulties you are having in a timely manner.

Communication

Contact with your instructor should be done using email. Since these are on-line courses, you should not expect your instructor to be in the office except through scheduled times. You should expect reasonable access to your instructor through email. Instructors will answer their email within 24 hours Monday through Friday. In some cases, the instructor may email the entire class if the same questions/problems are being asked, as opposed to emailing everyone individually. If you fail to get a response within 24 hours, please contact the department secretary at 425-4349. E-mail will be handled using your UTC e-mail address (firstname-lastname@utc.edu) for communications. Please check your

UTC e-mail regularly. If you have problems with accessing your e-mail account, contact the Help Desk at 423/425-4000. Other forms of communication such as SKYPE or Microsoft Life Messenger may be used at your instructor's discretion.

MAKE-UP POLICY:

EVALUATION:

Letter grades will be assigned as follows:

- A= 90-100%
- B=80-89%
- C=70-79%
- D= 60-69%
- F=below 60%

Grading Policy: Grades will be determined by the following.

New Perspectives Microsoft Office 2007			
Skills Modules	Topic	Percent of Total Grade	Deadline for completion of tests
1	Windows Operating System (XP, Vista, or Windows 7) and File Management	5	1/24
2	Word (Tutorials 1, 2, 3, and 4)	15	2/20
3	Excel (Tutorials 1, 2, 3, and 4) and Integration Tutorial 1	15	3/27
4	Access (Tutorials 1 and 2)	15	4/10
5	Power Point (Tutorials 1 and 2)	5	4/24
New Perspectives Computer Concepts 2010			
Chapter	Topic	Percent of Total Grade	Deadline for completion of tests
1	Computers and Digital Basics	5	1/24
2	Computer Hardware	5	2/7
3	Computer Software	5	2/21
4	Operating systems and File Management	5	3/7
5	LANs and WLANs	5	3/28
6	The Internet	5	4/11
7	The Web and E-mail	5	4/25
Discussion Questions			
Post three replies to one instructor posted question each week		10	Complete by Saturday of each week

The last section in this syllabus called "Student Tasks Workflow and Guide for Graded Materials" indicates which software program to use and which tabs and links to click in order to complete the graded items above.

Procedure

This course work consists of two areas: computer skills and computer concepts. There are five skills modules and seven concepts chapters. In the case of the skills modules, these correspond to the major office skills: Windows and File management, Word, Excel, Access, and Power Point. In the case of the concepts modules, these will correspond to the chapters in your text books (on-line). For the skills modules you will be given an opportunity to "test-out" of that skill by taking a Skills Evaluation exam. Everyone may and should take Skills Evaluation of all modules. This should provide you with the opportunity to assess your knowledge of the topic. If you do well on the Skills Evaluation and are happy with the Skills Evaluation grade, notify your instructor and move to the next topic. Specific details (such as instructor handouts) are provided in the Course Information tab. If you find you need additional work on that topic, you will need to complete a series of lab assignments prior to taking the Module Test. It is mandatory for you to complete these lab assignments. The details for the assignments are provided in the **Skills Assignment** section of the syllabus. Additional help is provided through SAM training. Your instructor should guide you on these. These are not mandatory.

The concepts portion of the class will operate a little differently. You are expected to do four tasks for each chapter. 1). Read the material in the book. 2). Complete the **Review Check** for each chapter found under the tab named Assignment in Blackboard (UTC Online), then the "New Perspective Computer Concepts" link. 3). Participate in discussion questions related to the material for that module. 4) Complete the concepts exam found under the "SAM Assignments" tab in SAM. The details for the assignments and discussions are provided in the Concepts Assignments section of the syllabus.

To make sure you do not procrastinate and fall behind in this class there are specific deadlines for completing each module. Refer to the schedule for those deadlines.

Below are details the tests and assignments. Following is a flow diagram of the skills modules.

Skills Evaluation

A Skills Evaluation for each Office 2007 skills module will be available from the first day of classes. These tests will be given using SAM (See SAM section of this syllabus for additional information). It will not be password protected. These tests may be taken one time. If you like the grade of the Skills Evaluation test, you will not have to complete any additional work associated with that topic. If you do not like the grade from the evaluation test, you are expected to complete the skills project assignments associated with that module and eventually take a skills module test. To keep you moving in this class, there are deadlines associated with each of the skills modules. Be sure and pay close attention to those deadlines.

Skills Assignments

The Skills Assignments are SAM projects similar to Case problems found at the end of each chapter of the module but are called projects obtained and submitted through your SAM connection. The completed assignments will not be accepted from emails. SAM projects use Microsoft Office to complete and are analyzed through SAM. You will have the opportunity to submit a project up to three (3) times to correct any mistakes. See the Course Information tab for how to accomplish this task. These assignments **MUST** be completed before you can take the Module Test.

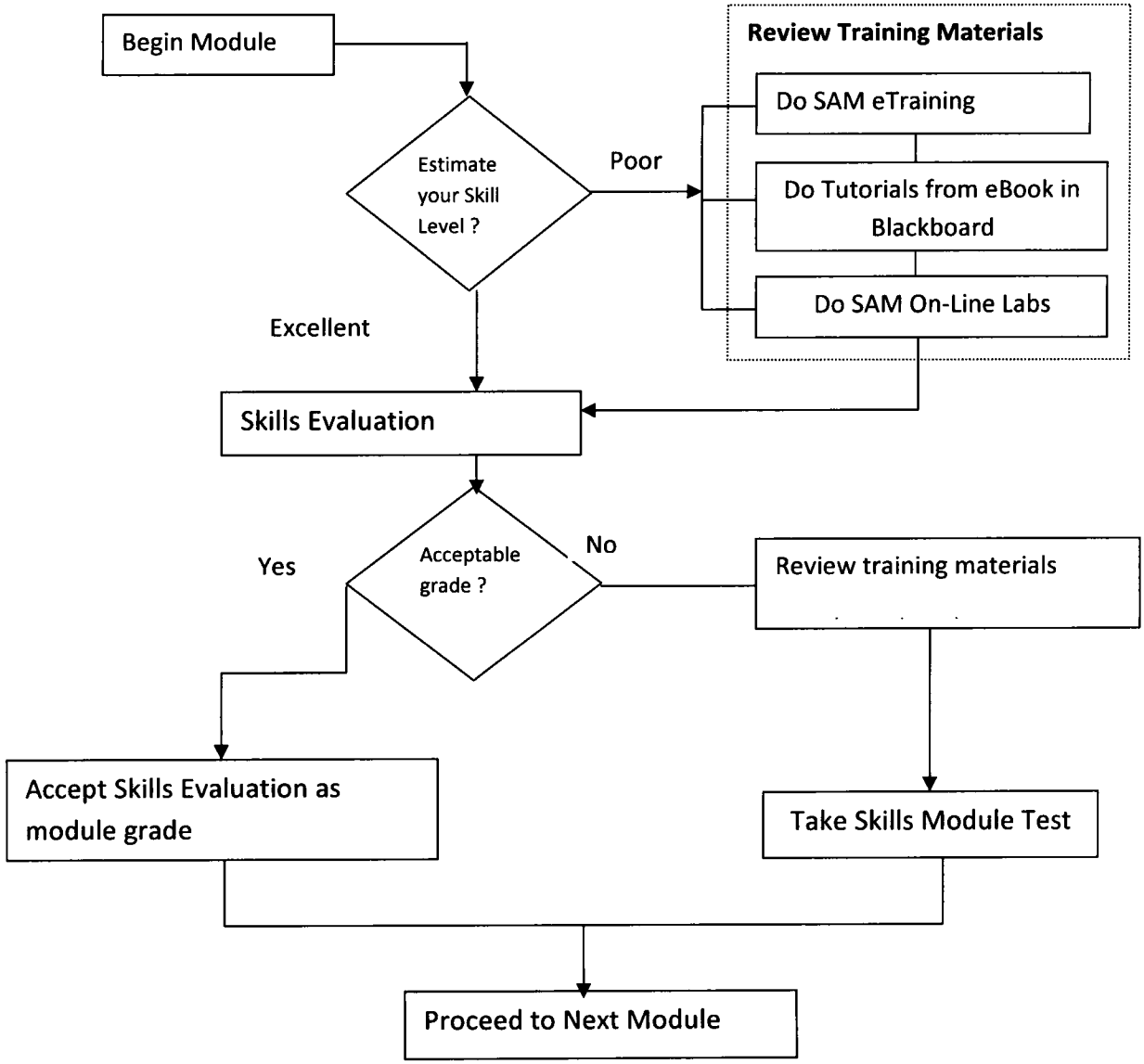
Skills Module Test

The Module Test must be taken if you did not take the Skills Evaluation or you do not like your grade from the Skills Evaluation. The Office 2007 skills Module Test will use SAM (See SAM section in the syllabus for information). You will get only one chance to take the Module Test and the grade you receive on the Module Test will be the grade recorded. You **MUST** complete all assignments and the Module Test by the date posted on the schedule. The heading for that column is Deadline for Completion of Tests. Failure to take the test by the required date will result in a zero for that module.

Skills Module Decision Diagram

To complete a module there are several possible paths.

Depending on your familiarity and skill with a module you may skip some or all of the textbook and training procedures and take the Skills Evaluation. If you are satisfied with the resulting grade from the Skills Evaluation, notify your instructor to record this grade for the module then begin the next module. Be certain to meet the required deadline dates. See the diagram below.



Concepts Assignments

Concept assignments are designed to enhance your learning of the material. They consist of four parts for each chapter. 1) Read the assigned chapter 2) An assignment (short quiz) covering the material found in that chapter. These assignments are listed under the assignments tab in UTC Online. These are not grades and are used for your preparation of the SAM exam on each chapter. You will need to complete the Review Check prior to taking the Module Test. It is mandatory for you to complete this Review Check, which acts like a test but does not count and which allows you to see what questions you got correct and any questions you got incorrect. 3) Discussion question replies to posted questions found under the Discussion Board tab in Blackboard. 4) Computer Concepts Chapter exam found in SAM under the SAM Assignments tab. The first three parts **MUST** be completed before you can take the Computer Concepts SAM Test.

The second part of these concept assignments is discussion questions centered on the topic you are reading. One discussion question will be posted each week under the "Discussion Board" tab of UTC Online. You are required to answer the question and reply to other student's posted answers in a discussion forum. Each post must be a minimum of 100-150 words. You will not receive credit for responses such as "I totally agree". Students are required to post at least once and finish all posts by the following Saturday. The first post is due by midnight of the 3rd day following the post and must be a direct response to the post. (For example, if the post is made on Monday, the first post is due by midnight on Thursday.) The instructor will participate in the forum as an active discussant as well.

Your participation in the discussion forums should be able to be classified into one (or more) of the following categories.

- Presenting new, novel ideas or individual perspectives or ideas on the topics being discussed.
- Current events from the news or the internet related to the discussion and that will enhance the learning of the students. Provide full bibliographic citation about the references so your colleagues can find/access the material.
- Questions related to the material that will move the discussion forward. These can be new relevant areas of exploration.
- Comments that offer more information, outside experience or specific examples of the content under discussion.

Karen Adsit from the UTC Walker Resource Center made the following statement that is very relevant.

> "If you come in early and post and never come back to the discussion forum, it is like cruising by the classroom, sticking your head in the door, making a profound statement, and then moving along down the hall. If you don't come back in, you don't "hear" what others have to say about your posts. This is not a discussion. If you come in late (for example, on the last day of the discussion), it is like coming to the classroom on a Saturday, sitting down and discussing with no one there to hear you. This is not a discussion as your classmates may not have a chance to respond to your posts."

Discussions are not dialogs; they take an exchange of information through the week by each of you. Discussion posts make up 10% of your grade. This could be the difference in a letter grade or passing or failing. Do not neglect to do the discussions.

Concept Test

The concepts tests are not optional and will be available only upon completion of the Review Checks and discussions (both in UTC Online) for each module. These tests consist of multiple choice questions and are administered using SAM. (See the SAM section for information.) You will get only one chance to take each test and the grade you receive on the test will be the grade recorded. You **MUST** complete all assignments, discussions and the test by the date posted on the schedule. The heading for that column is Deadline for Completion of Tests. Failure to take the test by the required date will result in a zero for that module.

SAM

SAM stands for Skills Evaluation Manager. It is designed to provide a testing mechanism for evaluating both your skills with various Office Products, as well as multiple choice questions for the concepts material. SAM comes with three modules, Testing, Training, and Projects. All Skill Evaluation and Office 2007 module tests will be conducted using SAM. Training is available for any help you might need with the skills aside from the step by step instructions provided in your text. The SAM Assignments tab contains the lab assignment problems for each Office 2007 module if you need to complete the project assignments.

You should have received a pin code for SAM by online purchase or from the bookstore. You will need to sign onto SAM and join your class' section. To sign up you will need to do the following:

- Go to the SAM tab in this course. It should connect you directly to SAM. If it doesn't you may connect to http://SAM2007.course.com.
- Select the New User option. The institution code is V7879302.
- Complete the blanks with your name, create a user ID, and password. I would suggest you use your UTC ID and password but you can select anything you desire just be able to remember it.
- Click on the section button
- Click on Join a Section
- Move the appropriate section number from the list on the left to the box on the right using the arrow on the screen
- Click Save
- Next, a section. You will not be able to take the exams unless you complete the SAM log-on and join the proper UTC section for your class.

ADA STATEMENT:

Attention: If you are a student with a disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) and think that you might need special assistance or a special accommodation in this class or any other class, call the Office for Students with Disabilities at 425-4006, come by the office - 102 Frist Hall or see http://www.utc.edu/OSD/.

If you find that personal problems, career indecision, study and time management difficulties, etc. are adversely affecting your successful progress at UTC, please contact the Counseling and Career Planning Center at 425-4438 or http://www.utc.edu/Administration/CounselingAndCareerPlanning/.

TEXTS:

To reduce costs, texts will be online through UTC Online. When logging into UTC Online, you will be asked for a code. This is the code which you should have received when purchasing the text. You must purchase your text in order to access the class. You will use all the texts associated with this class. If you are unable to purchase you text within the first week or two of class, we suggest you drop the class and take it at a later time. You will get too far behind if you do not have your text immediately. This is a heavily text oriented class.

Important Dates

Student Tasks Workflow and Guide for Graded Materials

1) Concepts Chapters (New Perspectives Computer Concepts 2011). For each Concepts Chapter:

Software Tool	Function (Thing to do)	Software Tab/Link
Blackboard (UTC Online)	Read and study the chapter in the Concepts book	✓ Tab: eBooks ✓ Link: "New Perspective … Introductory Computer Concepts" & scroll down to the correct chapter
Blackboard (UTC Online)	Complete Concepts Chapter Assignment (Required before taking concepts exam in SAM)	✓ Tab: Assignments ✓ Link: "Concepts Assignments" Folder ✓ Link: Chapter <#> - Concepts
SAM	Take Concepts Chapter Exam **GRADED**	✓ Tab: SAM Assignments ✓ Link: Concepts Exam (Chapter <#>)

2) Discussion Questions (Posted in Blackboard). For each Chapter Discussion Question:

Software Tool	Function (Thing to do)	Software Tab/Link
Blackboard (UTC Online)	Post answers/replies to discussion questions. **GRADED**	✓ Tab: Discussion Board ✓ Link: Computer Concepts – Chapter <#> ✓ Link: Discussion Question ✓ Click "Reply"

3) Skills Modules (Microsoft Office 2007 Applications). For each Skills Module:

Software Tool	Function (Thing to do)	Software Tab/Link
SAM	Take Skills Evaluation **GRADED**: If chosen by the student to do so	✓ Tab: SAM Assignments ✓ Link: Evaluation - <module>
(none)	Decide if you like the score you got in the Skills Evaluation above. If so, STOP for this module!!!	✓ Email your instructor and indicate whether you want to accept the Skills Evaluation score or go on...
SAM	Take SAM Training	✓ Tab: SAM Assignments ✓ Link: eTraining - <module>
Blackboard (UTC Online)	Go through the Lab Tutorials	✓ Tab: eBooks ✓ Link: "New Perspective Microsoft Office 2007 eBook" & scroll down to the correct module & tutorial
SAM	Work on a Skills Lab Assignment for an Application/Module	✓ Tab: SAM Assignments ✓ Link: Lab Assignment - <module> Tutorial <#>
SAM	Take the Skills Module Test (Note all tutorials for Module	✓ Tab: SAM Assignments ✓ Link: Module Test - <module>

	must be done first) **GRADED:** Unless Skills Evaluation grade chosen instead	

OLD: CPSC 1100 - Fundamentals of Computer Science

(4) Credit Hours

An introduction to computer science concepts and computer software development using a higher level language. Algorithms, flowcharting, programming, and documentation of numerical and non-numerical problems. Introduction to computer science terminology and concepts such as computer hardware and computer application areas. Lecture 2.5 hours, laboratory 2 hours.

Prerequisites: 4 years of college preparatory mathematics; UTC Math Placement Level 30 or Mathematics 131 or 144.

NEW: CPSC 1100 - Fundamentals of Computer Science

(4) Credit Hours

An introduction to computer science concepts and computer software development using a higher level language. Algorithms, flowcharting, programming, and documentation of numerical and non-numerical problems. Introduction to computer science terminology and concepts such as computer hardware and computer application areas. Lecture 2.5 hours, laboratory 2 hours.

PRE-REQUISITES: MATH 1130 or MATH 1710 or MATH 1720 or MATH 1830 or MATH 1910 or MATH 1920 with a minimum grade of C or department head approval

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SYLLABUS:

CPSC 1100 - Fundamentals of Computer Science

COURSE: CPSC.1100.00/CRN 21090

TITLE: Fundamentals of Computer Science

CREDIT: 4.0 hours

FACULTY: Prof. Mina Sartipi Office: 314-F EMCS
Phone: 423-425-5336 E-mail: mina-sartipi@utc.edu

Office Hours: As posted or by appointment

PRE-REQUISITES: MATH 1130 or MATH 1710 or MATH 1720 or MATH 1830 or MATH 1910 or MATH 1920 with a minimum grade of C or department head approval

COURSE DESCRIPTION:
An introduction to computer science concepts and computer software development using a higher level language. Algorithms, flowcharting, programming, and documentation of numerical and non-numerical problems. Introduction to computer science terminology and concepts such as computer hardware and computer application areas. Lecture 2 hours, laboratory 3 hours. Laboratory/Studio fee will be assessed.

COURSE OBJECTIVES: To introduce students to computer concepts, problem solving and computer programming. The course will provide a broad overview of those topics that are considered the most important areas of computer science. There will also be discussions of the computer science professionals and societal ethical issues.

MAKE-UP TESTS:

Makeup tests will not be given. If you are unable to take a test, the grade of your final exam will be substituted for that grade. **Failure to take the final will result in a zero**

HONOR CODE:
Please uphold the academic honor code (see http://www.utc.edu/Administration/AcademicAffairs/FacHandbk/Chapter5.htm). Violations will be reported to the office of Student Development for investigation and penalties.

EVALUATION:

Tests	50%
Lab Assignments	25%
Assignments and Quizzes	15%
Attendance	10%

90 - 100	A
80 - 89	B
70 - 79	C
Under 70	F

Behavior Policy:
Disruptive behavior in the classroom will not be tolerated. Cell phones will not be tolerated during lecture or lab. Cell phone usage will result in a 0 for the lab or exam.

Course Website and Communication:
We will be using the Blackboard system. You may access lecture notes, labs, and your grades through this system. I will also use the blackboard system to communicate with you via email. Therefore, it is very important that your UTC email address is current. If you do not read your UTC email, please have it go to the address you do read. Failure to read an email will not relieve you of the responsibility of knowing the information.

Quizzes:
- There will be quizzes during the semester.

- All quizzes are closed books and closed notes.
- The lowest quiz grade will be dropped from the final consideration.

Lab Policies:
-Lab Attendance is mandatory.
-You will work on the labs individually.
-Your lab assignments are due at the **beginning** of the next lab unless otherwise informed. Any lab exercise/assignment turned in after it is due will be penalized **25% per lab period** late. Labs later than 2 lab periods will not be accepted for grade. Being late to a class is not excuse for turning in late labs.
-If you miss a lab, you should still complete the assignment on your own but it will **only receive half credit.**
-Out of class assignments are also to be completed individually. These are **NOT** a partnership effort.
-Any students submitting labs showing evidence of inappropriate collaboration will receive a warning and a 0 for that lab grade for the first offence. Both the giver and receiver of the help will be penalized. Subsequently violations will be treated as an honor code violation and may result in failure in the class.

Student Responsibilities:
You are responsible for reading all materials and bringing the correct books and materials to class. Failure to bring the correct materials will not excuse you from meeting the requirements of the lab.

TEXTBOOKS: Big Java, 4th edition, Hortsman, Wiley,
ISBN: 978-0-470-50948-7
A Guide to Work with Visual Logic, Crews and Murphy, Course Technology
ISBN: 978-0-324-60119-0
Visual Logic, 1st edition, Vanguard, Course Technology
ISBN: 978-1-4188-3773-0

Material: Your UTC Onenet and Blackboard account login information. I highly recommend a flash drive (64MB or greater) to store your assignments and labs.

Important Dates:

Attention:
-To enhance student services, the University will use your UTC email address (firstname-lastname@utc.edu) for communications. Please check your UTC email on a regular basis. If you have problems with accessing your email account, contact the Help Desk at 423-425-4000. You may change your email to another address if desired. Contact the Help Desk for instructions to do so.

- This syllabus is subject to change with notification on blackboard, email, or other written notification.

ADA STATEMENT: Attention: If you are a student with a disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) and think that you might need special assistance or a special accommodation in this class or any other class, call the Office for Students with Disabilities at 425-4006, come by the office at 102 Frist hall, or see http://www.utc.edu/OSD/.

If you find that personal problems, career indecision, study and time management difficulties, etc. are adversely affecting your successful progress at UTC, please contact the Counseling and Career Planning Center at 425-4438 or
http:www.utc.edu/Administration/CounselingAndCareerPlanning/.

OLD: CPSC 1110 Data Structures and Program Design

(4) Credit Hours

Continued development of programming style using abstract data structures and top-down design. Topics covered include: debugging and testing of large programs, emphasis on algorithm development, list processing, recursion, stacks, trees, searching, and sorting. Security issues will also be discussed as material permits. Lecture 2.5 hours, Laboratory 2 hours.

PRE-REQUISITES: CPSC 150 with grade C or better.

NEW: CPSC 1110 Data Structures and Program Design

(4) Credit Hours

Continued development of programming style using abstract data structures and top-down design. Topics covered include: debugging and testing of large programs, emphasis on algorithm development, list processing, recursion, stacks, trees, searching, and sorting. Security issues will also be discussed as material permits. Lecture 2.5 hours, Laboratory 2 hours.

PRE-REQUISITES: PREREQUISITES: CPSC 1100 with a minimum grade of C and MATH 1720 or MATH 1830 or MATH 1910 or MATH 1920 with a minimum grade of C or department head approval.

SYLLABUS:

CPSC 1110 Data Structures and Program Design

COURSE: *CPSC.1110.00/CRN 21092*

TITLE: Fundamentals of Computer Science

FACULTY: Kathy Winters, 425-4378, 314D EMCS, Monday, Wednesday, & Friday 10-11: Tuesday & Thursday 10-12:30 and 3-4, Kathy-Winters@utc.edu

PREREQUISITES: CPSC 1100 with a minimum grade of C and MATH 1720 or MATH 1830 or MATH 1910 or MATH 1920 with a minimum grade of C or department head approval.

COURSE DESCRIPTION:

Continued development of programming style using abstract data structures and top-down design. Topics covered include: debugging and testing of large programs, emphasis on algorithm development, list processing, recursion, stacks, trees, searching, and sorting. Security issues will also be discussed as material permits. Lecture 2.5 hours, Laboratory 2 hours.

COURSE OBJECTIVES:

To introduce the student to the concept of abstract data structures and other problem solving tools including top-down design, object oriented programming, module development, algorithm development, program testing and debugging.

At the end of this course the student should have the knowledge of:

- interfaces.
- inheritance.
- input and output.
- exception handling.
- recursion.
- sorting and searching.
- efficiency as determined by Big O.
- linked lists.
- stack and queue.
- hash table
- tree
- binary input and output

ATTENDANCE PLOCY:

Attendance in both lecture and lab class is mandatory. The university recognizes the need for students to be present in freshmen courses. Regular attendance is necessary for success. With this in mind, attendance will be taken in this course in both lecture and lab.

Active class and laboratory participation in all discussions; this means spending some quality time reading and preparing for class and lab meetings and discussions.

MAKE-UP POLICY:

There will be no make-up tests. The final exam grade will replace an exam you miss. Failure to take the final exam will result in failing the course. All assignments are to be turned in on or before the assigned due date.

You must demonstrate that your in-class lab is working properly. To verify you must have your lab assignments signed by the lab assistant or instructor. A 25% penalty will be assessed for late assignments for the first week. No programming assignments will be accepted after the second late week and a grade of zero will be assigned for that assignment.

***UTC's Honor Code:**

The UTC Student Handbook describes the Honor Code (pages 7 - 9), which includes the following examples of violations related to computer usage: (UTC Student Handbook page 7 paragraph B.2)

1. Making use of unauthorized assistance during an examination or in preparing a graded assignment
2. Plagiarism
3. Making unacknowledged use of another's computer program
4. Unauthorized use, or misuse, of the University's computing facilities such as:

    •Logging on to an account without the knowledge and permission of the owner

    • Changing, deleting, and adding to the programs, files and data without authorization of the owner

    • Theft of program data and machine resources

    • Attempts to thwart security of any computer system

    • Attempts to disrupt the normal operations of any computer system

In addition, I will not tolerate the use of cell phones in my class. If you have an emergency situation please let me know so accommodations can be made.

Any suspected Honor Code violation in this course will be forwarded to the Honor Court for action, and an F will be assigned for the course grade. All graded work in this course is subject to the Honor Code, including examinations, programming exercises, and any written work prepared for the course. If you use code found on the internet you must cite your source.

EMAIL Announcement:

To enhance student services, the University will use your UTC email address (firstname-lastname@utc.edu) for communications. (See http://onenet.utc.edu for your exact address.) Please check your UTC email on a regular basis. If you have problems with accessing your email account, contact the Help Desk at 423/425-4000.

ASSESSMENT:

Attendance	10%
Laboratory assignments	40%*
Assignments	20%
Exams	30%

* This portion of your grade will include in-class lab assignments, as well as, out of class lab assignments.

Final Grade will be determined by the standard UTC grading policy. You must make a C or better to continue with your course work.

Percent	Letter Grade
90-100	A
80-89	B
70-79	C
60-69	D
Below 70	F

COURSE WEBSITE AND COMMUNICATION:

We will be using the UTC OnLine Blackboard system. You may access lecture notes, labs, and your grades through this system. You assignments will be posted in UTC OnLine. You will submit your assignment through UTC OnLine. **I will not accept assignments emailed to me.**

I will use the blackboard system to communicate with you via email. I can be reached by email during the week. I generally read my email on the weekend but cannot guarantee I will read or answer any email on the weekend. I will also not guarantee I will answer my email after 10, this includes the night before exams.

TEXTBOOK:

Big Java, 4rd Edition, Cay Horstmann, Wiley, ISBN 978-0-470-50948-7

ADDITIONAL MATERIALS:

Flash memory stick. Your UTC Onenet and Blackboard account login information

IMPORTANT DATES FOR SPRING 2010:

Martin Luther King holiday	January 17, 2011
Class begins	January 18, 2011
Last Day to Withdraw without a W	January 30, 2011
Midterm grade notifications	February 28-March 4, 2011

Last official day to Withdraw	March 13, 2011
Spring Break	March 14-20, 2011
Spring Holiday	April 22, 2011
Last Day of Classes	April 29, 2011
Final Exams	April 30-May 5, 2011

This syllabus is subject to change with notification on blackboard, email, or other written notification.

ADA STATEMENT: Attention: If you are a student with a disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) and think that you might need special assistance or a special accommodation in this class or any other class, call the Office for Students with Disabilities at 425-4006, come by the office at 102 Frist hall, or see http://www.utc.edu/OSD/.

If you find that personal problems, career indecision, study and time management difficulties, etc. are adversely affecting your successful progress at UTC, please contact the Counseling and Career Planning Center at 425-4438 or

http:www.utc.edu/Administration/CounselingAndCareerPlanning/.